

Practitioner's Docket No. 20336-00016

**PATENT**  
USSN: 10/722,176**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application.

Kindly amend claims 40-42 and 44 as follows:

**LISTING OF CLAIMS**

- 1-13. (Canceled)
14. (Previously presented) A delivery mixture comprising a generation 2 to 5 dendrimer and a nucleic acid capable of mediating RNA interference (RNAi).
- 15-16. (Canceled)
17. (Previously presented) The delivery mixture of claim 14, wherein the nucleic acid comprises a nucleotide sequence that encodes an RNA precursor.
18. (Previously presented) The delivery mixture of claim 17, wherein the nucleotide sequence that encodes an RNA precursor is operably linked to a polymerase III promoter.
19. (Previously presented) The delivery mixture of claim 14, wherein the nucleic acid is an RNA molecule.
20. (Previously presented) The delivery mixture of claim 19, wherein the RNA molecule is selected from the group consisting of a small interfering RNA (siRNA), micro-RNA (miRNA) and short hairpin RNA (shRNA).
21. (Previously presented) The delivery mixture of claim 20, wherein the RNA molecule is miRNA.
22. (Previously presented) The delivery mixture of claim 20, wherein the RNA molecule is shRNA.
23. (Previously presented) The delivery mixture of claim 20, wherein the RNA molecule is siRNA.
24. (Previously presented) The delivery mixture of claim 23, wherein the siRNA comprises a sense strand and an antisense strand, wherein the antisense strand has a sequence sufficiently complementary to a target mRNA sequence to direct target-specific RNAi.
25. (Previously presented) The delivery mixture of claim 24, wherein the sense strand and antisense strand are crosslinked.
26. (Previously presented) The delivery mixture of claim 25, wherein the siRNA contains a single crosslink.

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27. (Previously presented) The delivery mixture of claim 25, wherein the sense strand and antisense strand are psoralen crosslinked.
28. (Previously presented) The delivery mixture of claim 24, wherein the siRNA comprises a modification at the 3' OH terminus of the sense strand or antisense strand.
29. (Previously presented) The delivery mixture of claim 28, wherein the modification at the 3' OH terminus is selected from the group consisting of biotin, a peptide, a nanoparticle, a peptidomimetic and a dendrimer.
30. (Previously presented) The delivery mixture of claim 28, wherein the modification at the 3' OH terminus is photocleavable biotin.
31. (Previously presented) The delivery mixture of claim 28, wherein the modification at the 3' OH terminus is a dendrimer.
32. (Previously presented) The delivery mixture of claim 31, wherein the dendrimer is PAMAM.
33. (Previously presented) The delivery mixture of any one of claims 23-32, wherein the siRNA is between about 16 and 30 nucleotides in length.
34. (Previously presented) The delivery mixture of any one of claims 23-32, wherein the siRNA is about 21 nucleotides in length.
35. (Previously presented) The delivery mixture of any one of claims 24-32, wherein the antisense and sense strands are aligned such that the siRNA has 3' overhangs of between 1 and 4 nucleotides.
36. (Previously presented) The delivery mixture of claim 35, wherein the siRNA has 2-nucleotide 3' overhangs.
37. (Previously presented) The delivery mixture of claim 36, wherein the 2-nucleotide 3' overhangs are dTdT or UU.
38. (Previously presented) The delivery mixture of claim 14, wherein the dendrimer is selected from the group consisting of PAMAM, diaminobutane (DAB) and polyethylene glycol (PEG).
39. (Previously presented) The delivery mixture of claim 38, wherein the dendrimer is PAMAM.
40. (Currently amended) The delivery mixture of claim 39, wherein the PAMAM and nucleic acid capable of mediating RNA interference siRNA are present at a PAMAM: nucleic acid siRNA ratio of between about 10 µg and about 1mg PAMAM per 100 pmol nucleic acid siRNA.

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41. (Currently amended) The delivery mixture of claim 39, wherein the PAMAM and nucleic acid capable of mediating RNA interference siRNA are present at a PAMAM: nucleic acid siRNA ratio of between about 20  $\mu$ g and about 40  $\mu$ g PAMAM per 100 pmol nucleic acid siRNA.
42. (Currently amended) The delivery mixture of claim 39, wherein the PAMAM and nucleic acid capable of mediating RNA interference siRNA are present at a PAMAM: nucleic acid siRNA ratio of about 40  $\mu$ g PAMAM per 100 pmol nucleic acid siRNA.
43. (Previously presented) The delivery mixture of claim 39, wherein the dendrimer is a generation 4 dendrimer.
44. (Currently Amended) The delivery mixture of claim 39, wherein the nucleic acid capable of mediating RNA interference siRNA is localized primarily in discrete areas within the perinuclear cytoplasm when taken up by a cell.